Title	Install and commission on-site wastewater treatment and disposal systems		
Level	4	Credits	7

Purpose	This unit standard is for people who work in the drainlaying industry.
	<ul> <li>People credited with this unit standard are able to:</li> <li>install and commission an on-site wastewater treatment system;</li> <li>install pumps, filters, wastewater treatment components and controls for a disposal system;</li> <li>install an effluent treatment and collection system for the purpose of disposal.</li> </ul>

Classification	Plumbing, Gasfitting and Drainlaying > Drainlaying

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#### **Guidance Information**

 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to: Building Act 2004; Health and Safety at Work Act 2015; Plumbers, Gasfitters, and Drainlayers Act 2006; Plumbers, Gasfitters, and Drainlayers Regulations 2010; Resource Management Act 1991.

The following standards are available at <u>http://www.standards.govt.nz</u>: AS/NZS 1546.1:2008 On-site domestic wastewater treatment units – Septic tanks, AS/NZS 1547:2012 On-site domestic wastewater management, and AS/NZS 3500.2:2021 Plumbing and drainage, Part 2: Sanitary plumbing and drainage.

The following guides, which are available at <u>http://www.worksafe.govt.nz/worksafe</u>: *Good practice guidelines – Excavation safety*, Wellington: WorkSafe New Zealand, 2016;

*Guide for Safety with Underground Services,* Wellington: Department of Labour, 2002.

The following Building Code clauses, and any related Acceptable Solution and Verification Method documents, are available at <u>https://www.building.govt.nz/</u>: New Zealand Building Code Clause E1 Surface Water; New Zealand Building Code Clause G12 Water Supplies; New Zealand Building Code Clause G13 Foul Water.

Any new, amended or replacement referenced standards, codes of practice, guidelines, Building Code Acceptable Solutions and Verification Methods, or authority requirements affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

*Job specifications* refer to instructions (oral, written, graphic) and may include any of the following – manufacturers' instructions; design drawing detail specifications; specifications from a specialist source such as an architect, designer, engineer, or a supervisor; and site or work specific requirements.

*On-site wastewater treatment system* refers to single stage or proprietary, multistage, septic tank; any associated pumps, filters, and controls; and evapotranspiration beds, soakage trenches, or soakage pits.

- 3 Candidates must hold a current limited certificate trainee authorisation or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.
- 4 Assessment information All work must be completed in accordance with job specifications.
- 5 Level of performance

To achieve this standard the candidate must be capable of consistently performing the requirements:

- to current and relevant legislation, standards and codes (including safety);
- in an environmentally sustainable manner;
- within an acceptable timeframe;
- in the workplace;
- in different and unfamiliar contexts.

# Outcomes and performance criteria

### Outcome 1

Install and commission an on-site wastewater treatment system.

Range a single stage or a proprietary, multi stage, on-site wastewater treatment system.

## Performance criteria

1.1 Check base is able to accept installation of the on-site wastewater treatment system securely.

1.2 Install the on-site wastewater treatment system and associated components in accordance with manufacturer instructions.

1.3 Carry out commissioning of the on-site wastewater treatment system in accordance with manufacturer instructions.

## Outcome 2

Install pumps, filters, wastewater treatment components and controls for a disposal system.

## **Performance criteria**

- 2.1 Install pumps, filters, wastewater treatment components and controls for supply and disposal system.
- 2.2 Carry out installation and commissioning tests in accordance with relevant standards and codes.

## Outcome 3

Install an effluent treatment and collection system for the purpose of disposal.

Range may include but is not limited to – drip lines, evapotranspiration bed, soakage trench; evidence of one is required.

# Performance criteria

- 3.1 Determine the position of the proposed effluent treatment and collection system.
- 3.2 Confirm that the treatment and collection system proposed in the job specifications is appropriate for the intended use.
- 3.3 Install the effluent treatment and collection system.
- 3.4 Install appropriate control methods for protection of the effluent treatment and collection system.

### Range surface water run-off, stock control, vehicle access.

Range access point, invert levels, benching, risers, cascades, lid and adjustment ring, filters, fresh air inlet.

Planned review date	31 December 2029

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 May 2024	N/A

Consent and Moderation Requirements (CMR) reference0003This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

#### Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council <u>qualifications@waihangaararau.nz</u> if you wish to suggest changes to the content of this unit standard.